Anaerobic Digestion

Systems and Processes

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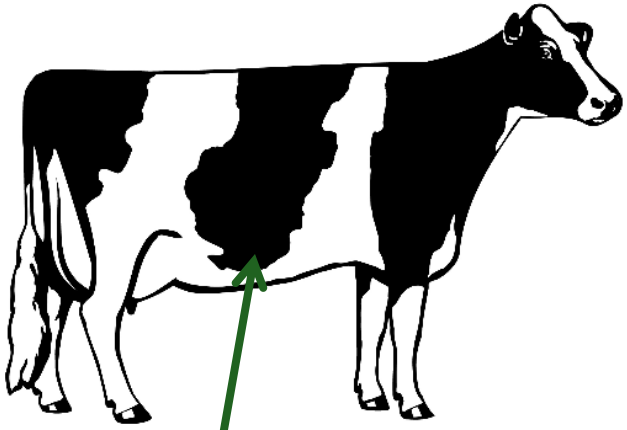
Anaerobic Digestion



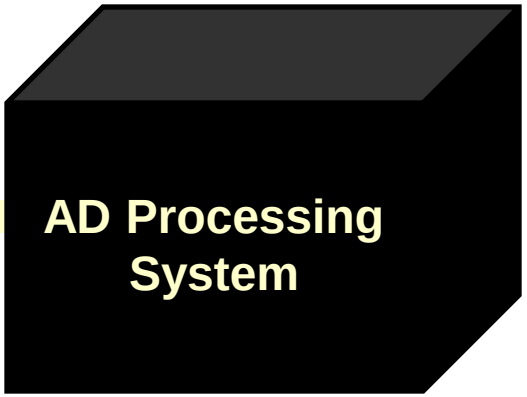
AD occurs here

and here

and here

Anaerobic Digestion Process

What is an AD System?

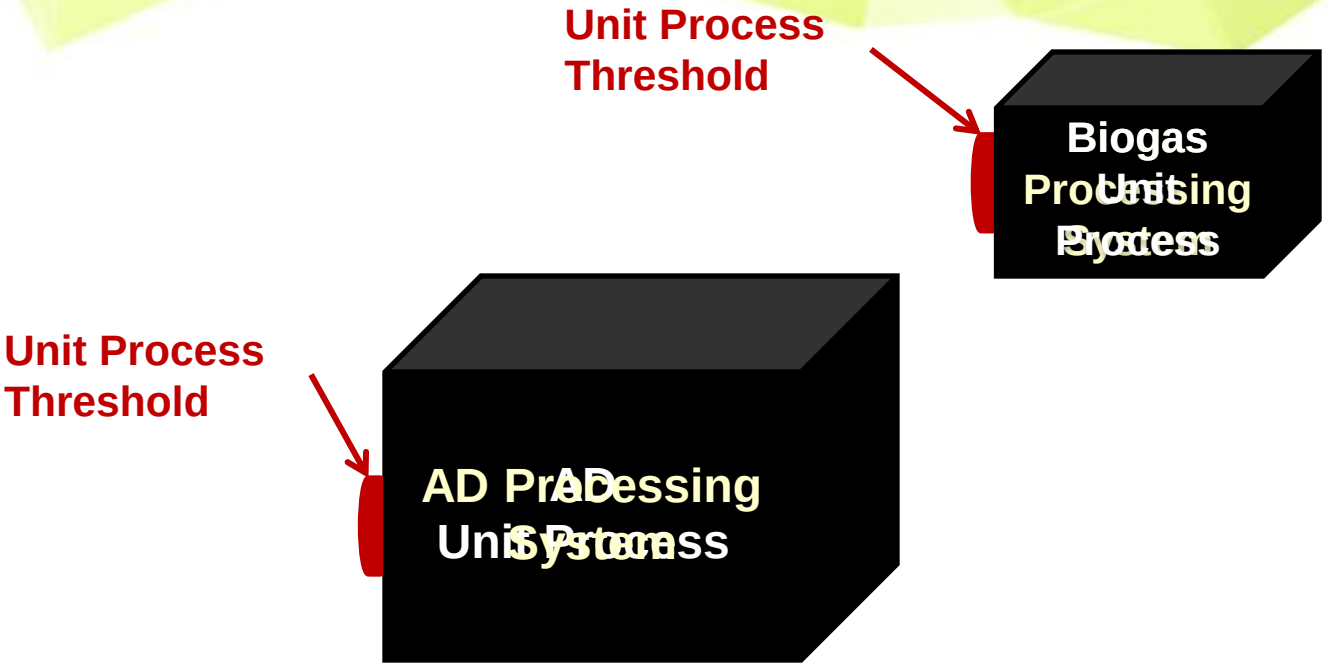


Designed to:

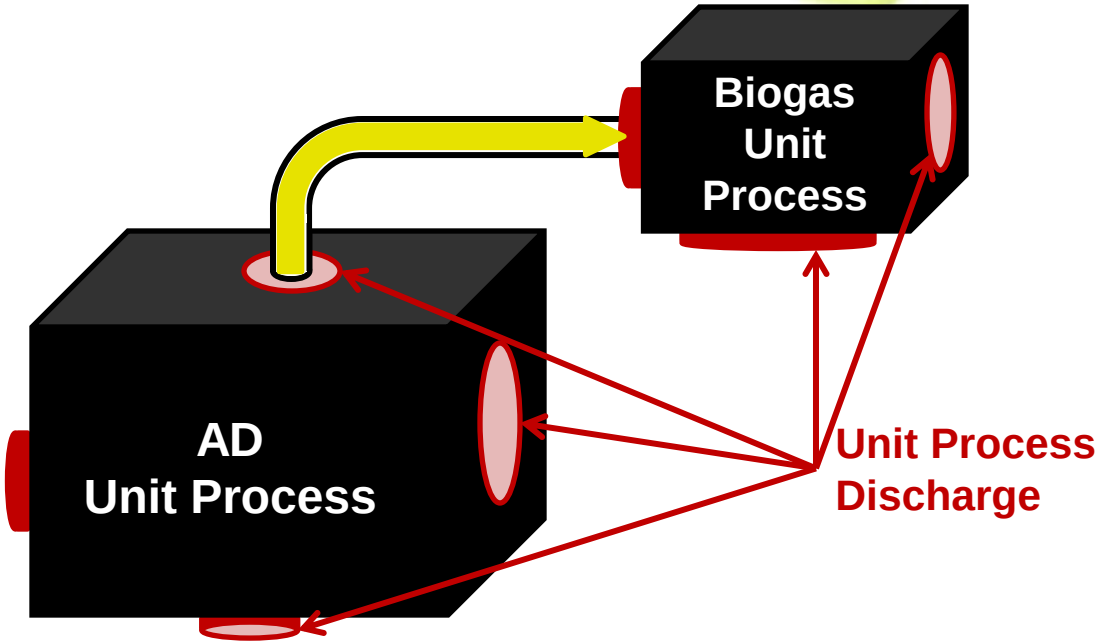
Optimize the natural conditions that best facilitate anaerobic digestion and maximize biogas production:

1. Adequate moisture
2. “Thriving” temperature
3. Optimum feedstock
4. Maximum mixing/introduction

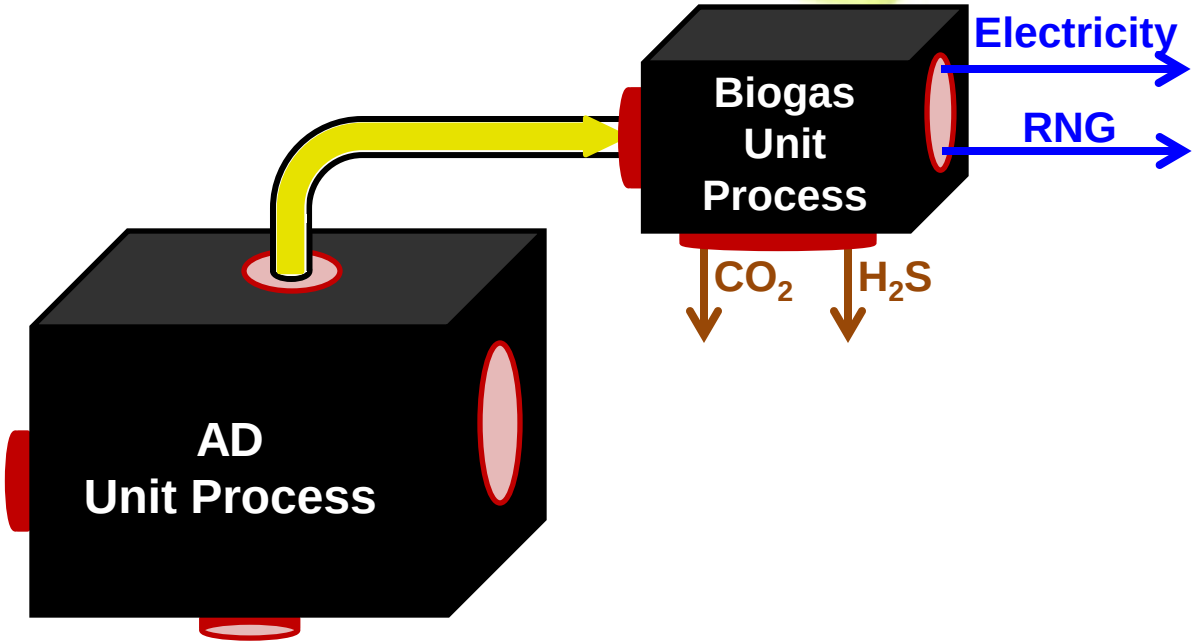
Anaerobic Digestion Process



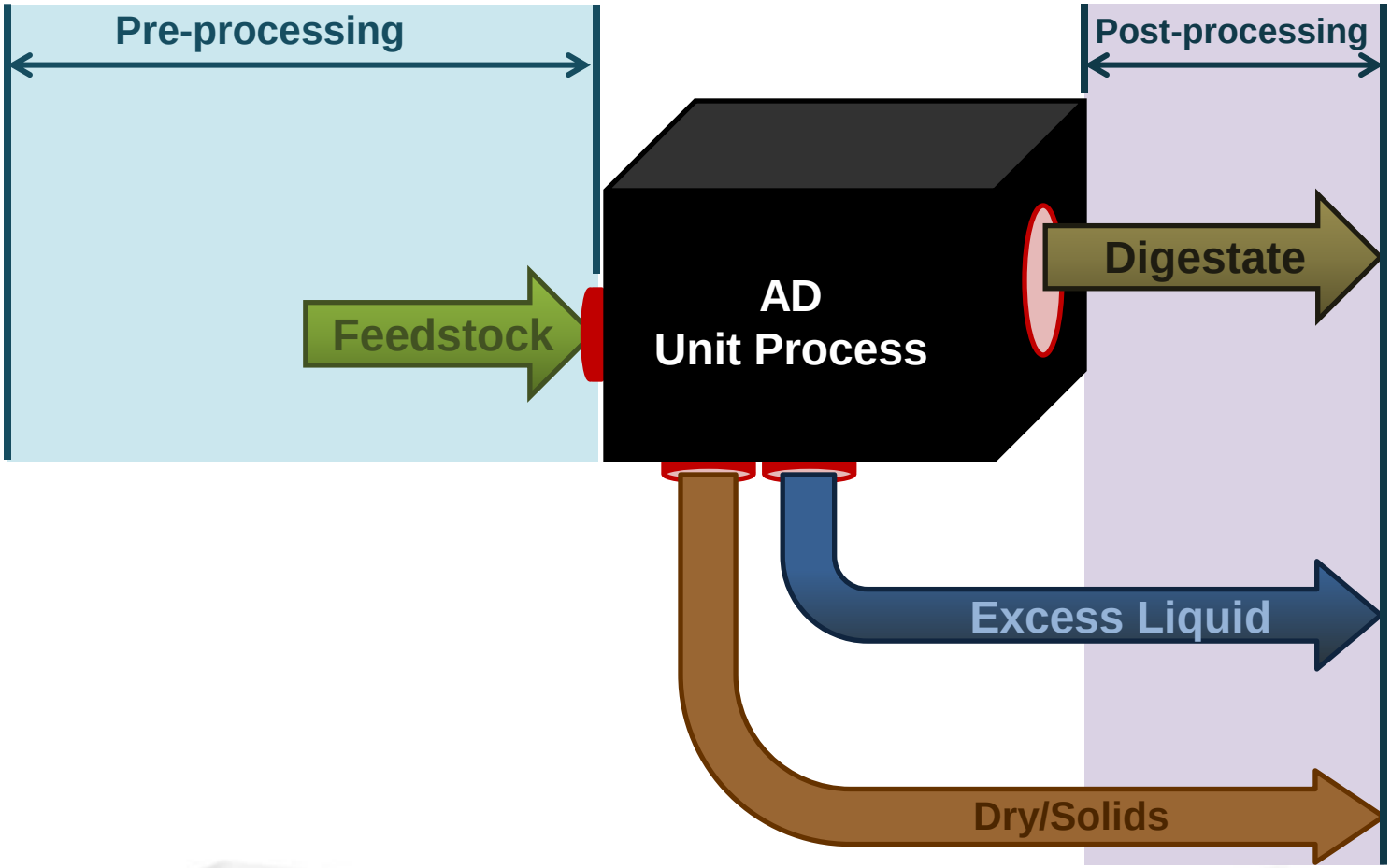
Anaerobic Digestion Process



Anaerobic Digestion Process

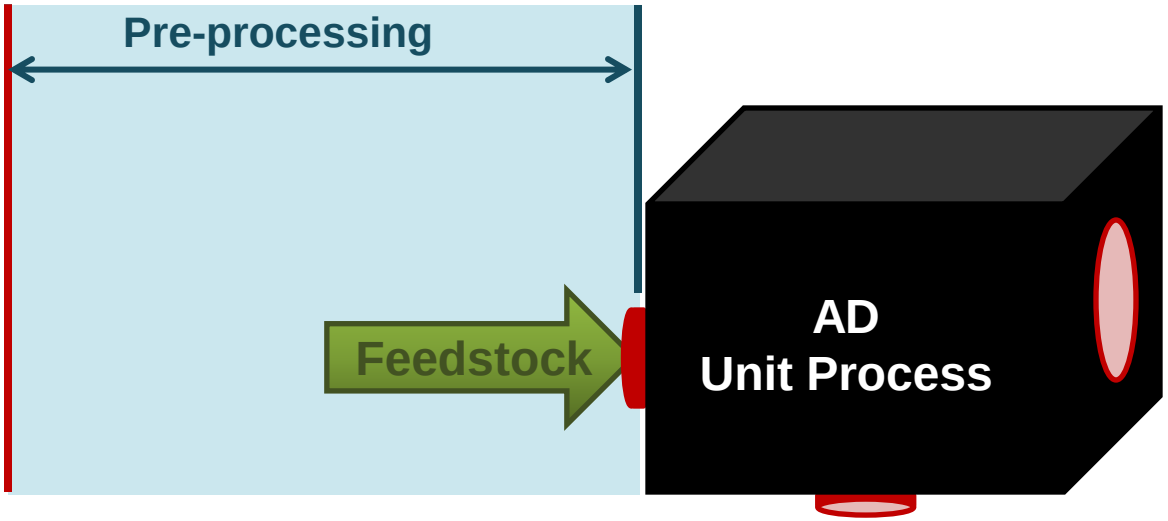


AD Process


Pre-processing
Post-processing
Feedstock
AD
Unit Process
Digestate
Excess Liquid
Dry/Solids

AD Process – Pre-processing

Collection

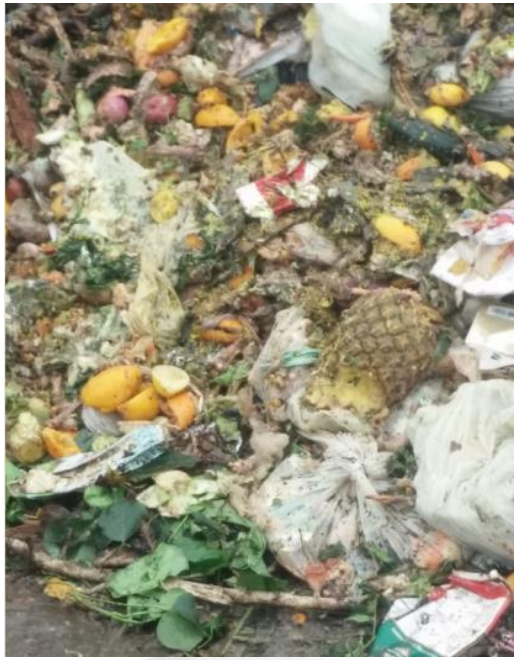


AD Process - Collection

- Source-separated Commercial
  - Super Markets, Produce Distributors

AD Process - Collection

- Source-separated Commercial
  - Super Markets, Produce Distributors
  - Restaurants, Institutional



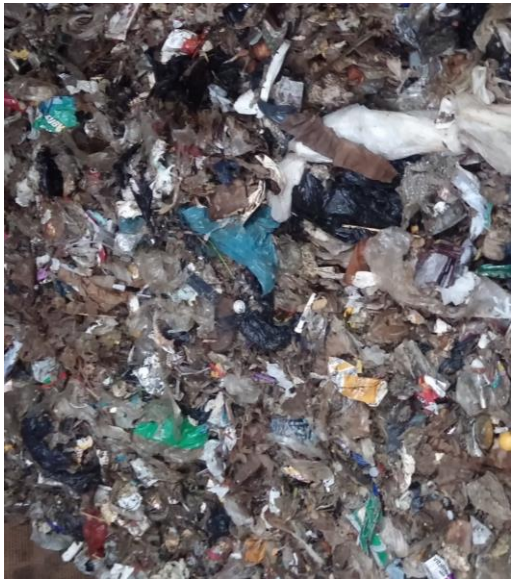
AD Process - Collection

- Source-separated Commercial
- Residential Green/Food?

AD Process - Collection

- Source-separated Commercial
- Residential Green/Food?
- Mixed-waste post-MRF Residuals

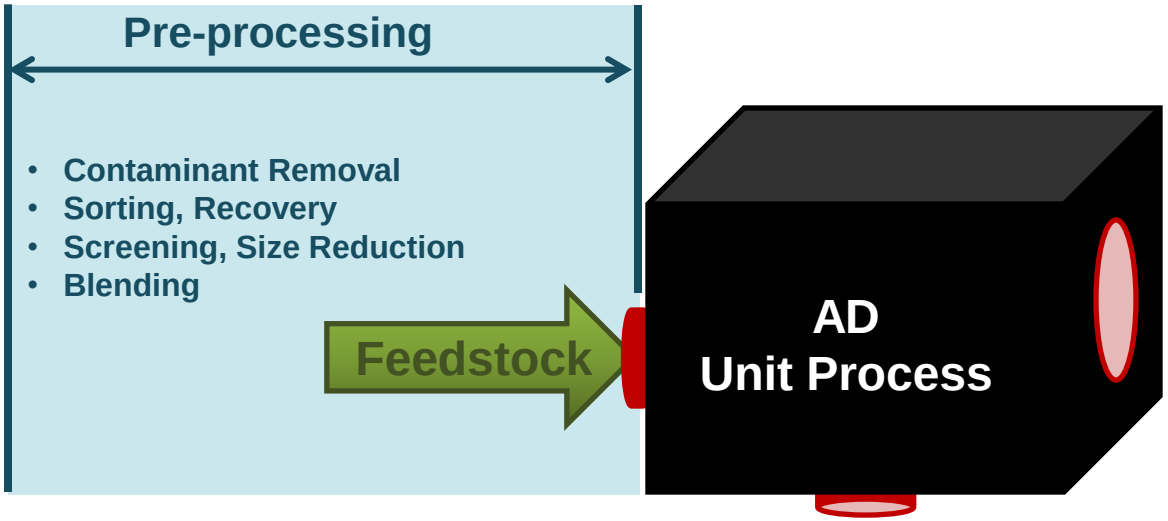




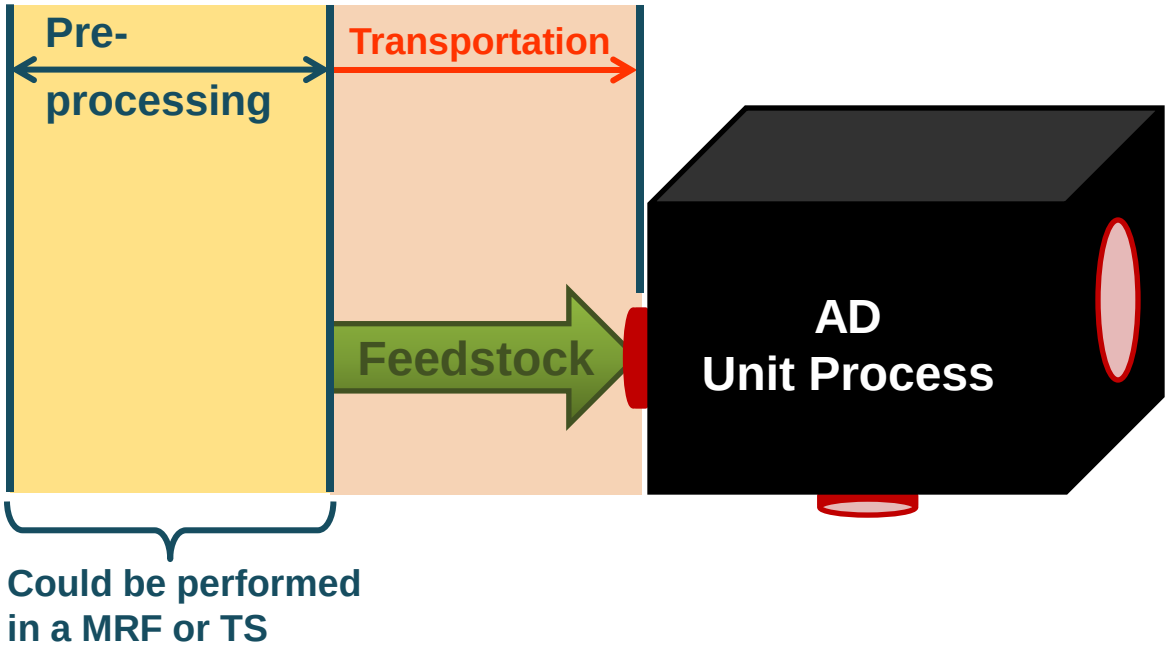
AD Process - Collection

- Liquids

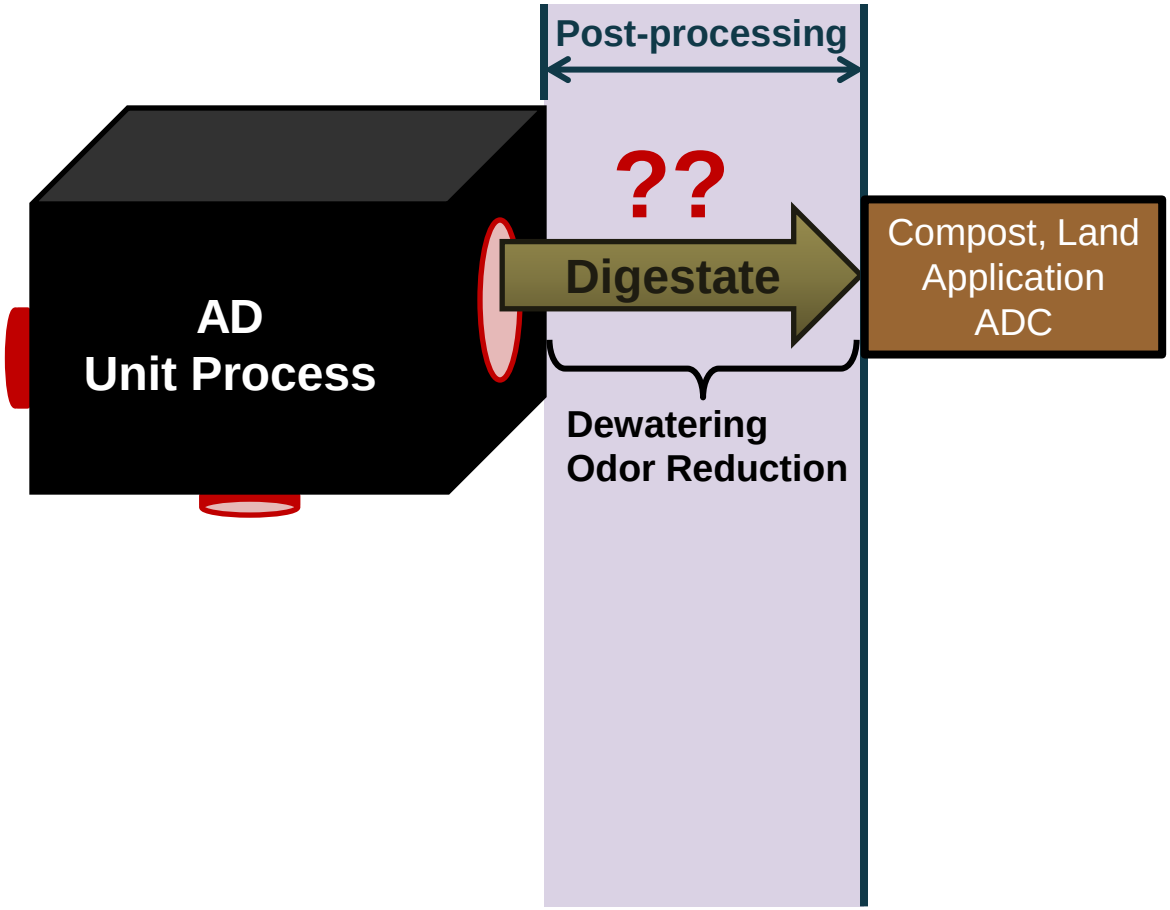
AD Process – Pre-processing



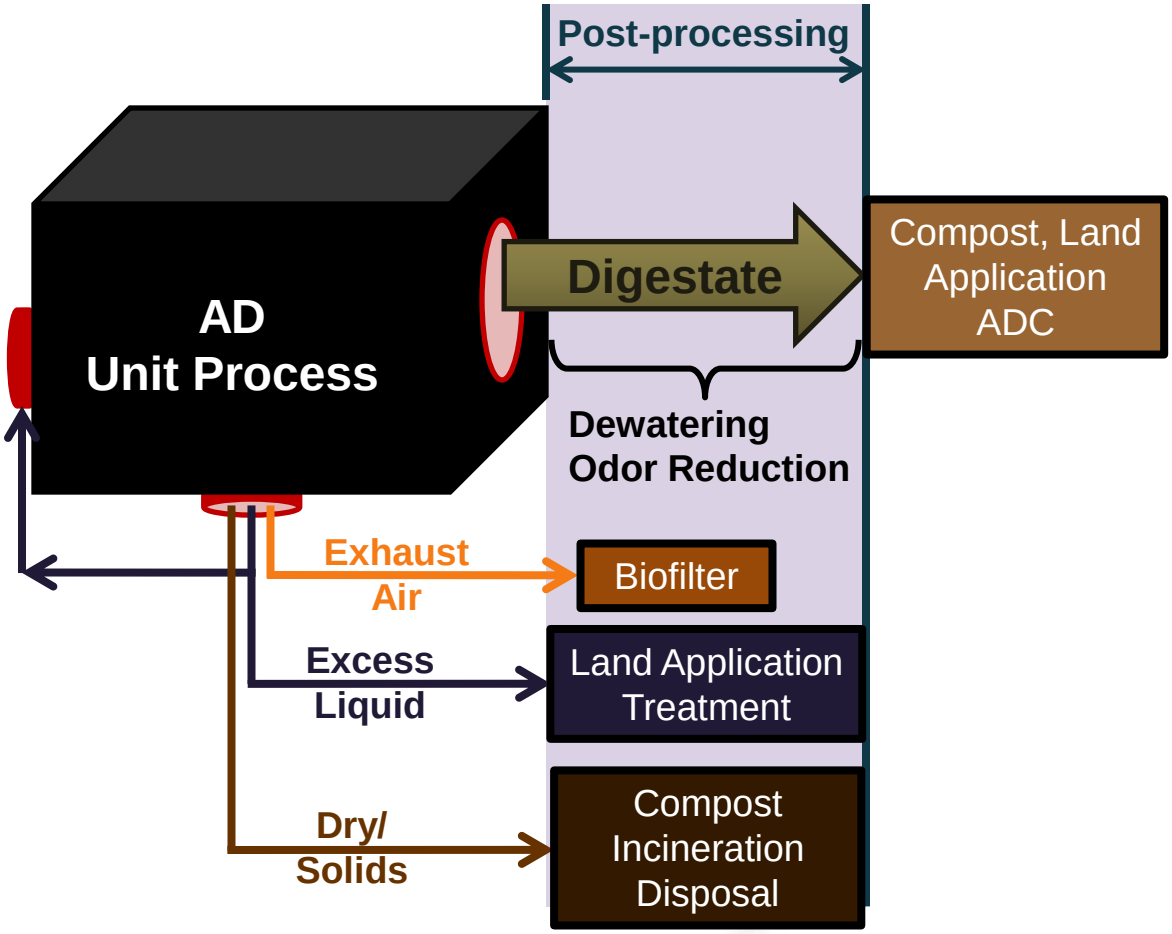
AD Process – Pre-processing



AD Process – Post-processing



AD Process – Post-processing



Types of AD Systems

Wet

Dry

- Dry Fermentation
- Plug Flow

Questions

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